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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/987,991 | 11/16/2001 | Bjorn Bengtsson | 59589.000028 | 8043 |

7590

10/06/2003

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| EXAMINER |
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HE, AMY

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| ART UNIT | PAPER NUMBER |
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2858

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,991

Applicant(s)

BENGTSOON, BJORN

Examiner

Amy He

Art Unit

2858

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7, 9-12, 14-25, 27-30, 32-43, 45-48, 50-58 and 60-63 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-63 is/are rejected.
- 7) ☒ Claim(s) 64 and 65 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

1. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-6, 9-12, 14-24, 27-30, 32-42, 45-48 and 50-54 are rejected under 35 U.S.C 102 (b) as being anticipated by Granville (U. S. Patent No. 5, 181, 026).

Referring to claims 1 and 37, Granville discloses a voltage divider system (in Figure 1A) comprising:

a high voltage impedance element/means(R_L), connected to an input node for receiving an input signal;

a low voltage impedance element/means (R_s), connected to the high voltage impedance element; and

at least one guard element/means (the combination of the resistive link 81 and the shield ring 82), the at least one guard element being coupled between the high voltage impedance element and ground (See Figure 1A);

wherein the at least one guard element comprises at least one capacitive element (shield ring 82); and

wherein the at least one guard element further comprises at least one resistive guard element (resistive link 81) coupled to the at least one capacitive element (shield ring 82).

Referring to claims 2 and 38, Granville discloses a sample node (see node in Figure 1A) between the high voltage impedance element/means and the low voltage impedance element/means for sampling a reduced voltage representation of the input signal.

Referring to claims 3-4 and 39-40, Granville discloses a measurement device connected to the sample node for sampling at least one of voltage, current, frequency and phase (column 4, line 21-25).

Referring to claims 5-6 and 41-42, Granville discloses that the high voltage impedance element/means comprises at least one resistive element/resistors (R_s in Figure 1A).

Referring to claims 9-10 and 45-46, Granville discloses that the guard element comprises a plurality of capacitive element/capacitors (the plurality of shield rings 82).

Referring to claims 11-12 and 47-48, Granville discloses a plurality of guard elements/capacitive guard (the plurality of shield rings 82).

Referring to claims 14-15 and 50-51, Granville discloses a resistive guard element/resistor (resistive link 81) coupled to the at least one capacitive element (shield rings 82), which increases a stability of a voltage drop across the high voltage impedance element/means.

Referring to claims 16 and 52, Granville discloses that the guard element (shield rings 82 and resistive link 81) is coaxially mounted around the high voltage impedance element/means.

Referring to claims 17-18 and 53-54, Granville discloses that the guard element (shield rings 82) shunts stray capacitive current to ground (column 20, lines 51-55), and the shunted capacitive currents stabilize a frequency response of the voltage divider (column 21, lines 21-67).

Referring to claims 19-24, 27-30 and 32-36, they are the method claims corresponding to the rejected system claims 1-7, 9-12 and 14-18 and 37-43, 45-48 and 50-54. They are rejected for the same reasons as stated above for the rejection of the system claims.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 7, 25, 43, 55-58 and 60-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Granville (U. S. Patent No. 5, 181, 026).

Referring to claims 7, 43 and 55, Granville discloses a high voltage impedance element (Rs in Figure 1A). Granville does not disclose that the high voltage impedance element comprise a plurality of resistors connected in series. It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Granville to use a plurality of resistor in series as the high voltage impedance element, since it has been held to be within the general skill of a worker in the art to select a known tool for a known purpose on the basis of its suitability for the intended use as a matter of obvious design choice *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA).

Referring to claims 56-58, Granville discloses that the capacitive guard element comprises a plurality of capacitive elements/capacitors (the plurality of shield rings 82).

Referring to claim 60-61, Granville discloses a resistive guard element/resistor (resistive link 81) coupled to the at least one capacitive element (shield rings 82), which increases a stability of a voltage drop across the high voltage impedance element/means.

Referring to claims 62-63, Granville discloses that the capacitive guard (shield rings 82) shunts stray capacitive current to ground (column 20, lines 51-55), and the shunted capacitive currents stabilize a frequency response of the voltage divider (column 21, lines 21-67).

Referring to claims 25, it is the method claim corresponding to the rejected system claims 7, 43 and 55. It is rejected for the same reasons as stated above for the rejection of the system claims.

Allowable Subject Matter

4. Claims 64-65 are objected to as being dependent upon a rejected base claim (claims 1 and 37), but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pellegrino (U. S. Patent No. 4, 034, 283)--Compensated voltage divider.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy He whose telephone number is (703) 305-3360. The examiner can normally be reached on 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, N. Le can be reached on 703-308-0750. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4900.

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AH

September 23, 2003

N. Le

N. Le

Supervisory Patent Examiner
Technology Center 2800